Wallstein

No. 586.

United States Department of Agriculture,

DIVISION OF PUBLICATIONS.

1
Ag84F
Reserve

FARMERS' BULLETINS

Nos. 251-275,

WITH CONTENTS AND INDEX.

PREPARED UNDER THE SUPERVISION OF

GEO. WM. HILL,

EDITOR AND CHIEF.

WASHINGTON:

GOVERNMENT PRINTING OFFICE.

1907.

348313

CONTENTS.

	Page.
FARMERS' BULLETIN No. 251.—EXPERIMENT STATION WORK, XXXIV.	
American-grown sugar-beet seed	5
Stimulants for seeds	7
Profits from spraying potatoes	9
Treatment of winter-injured fruit trees	10
Durum wheat for macaroni and bread making	14
Fertility of eggs	18
Indoor *versus* outdoor feeding for fattening steers	22
Roughage for fattening steers	25
Cheapening the dairy ration	26
Cotton-seed as feed for hogs	30
FARMERS' BULLETIN No. 252.—MAPLE SUGAR AND SIRUP.	
History of the maple-sugar industry	5
Present status of the industry	5
Past and present output of sugar and sirup	7
Sugar "mixers" and fabricators and their work	8
Necessity for sugar makers' organizations	9
Sugar maples	10
Sugar groves	14
Maple sap	25
The manufacture of sugar and sirup	26
FARMERS' BULLETIN No. 253.—THE GERMINATION OF SEED CORN.	
The value of a germination test	3
The average yield of corn to the acre	4
Testing individual ears	5
Selecting seed ears	6
Removing the kernels for test	6
Numbering the ears after sampling	7
The germination box	8
Results of germination tests	10
Conclusions	16
FARMERS' BULLETIN No. 254.—CUCUMBERS.	
Introduction	5
Growing cucumbers for early market in the open	6
Growing cucumbers for early market in cold frames	13
Growing cucumbers for pickling purposes	17
Forcing cucumbers under glass	22
FARMERS' BULLETIN No. 255.—THE HOME VEGETABLE GARDEN.	
Introduction	5
Location of the garden	6
Plan and arrangement of the garden	6
Preparation of the soil	9
Fertilizers	11
Seeds and plants for the garden	12
The sed bed	15
The handling of plants	16
Time of planting	19
Protection of plants	19
Cultivation of garden crops	21

Page.

Irrigation of garden crops 22
Precautions to avoid attacks of insects and diseases 23
Cultural hints for garden crops 24
Gardener's planting table 46

FARMERS' BULLETIN NO. 256.—PREPARATION OF VEGETABLES FOR THE TABLE.

Introduction 5
Structure and composition of vegetables 5
Classification of vegetables 6
General principles underlying vegetable cooking 9
Blanching vegetables as a cooking process 10
Waste in preparing vegetables 11
Losses in cooking vegetables 11
Changes that take place in cooking vegetables 12
Specific directions for several common vegetables 13
Vegetable soups 39
Seasonings and sauces for vegetables 43
Salads and salad dressings 46

FARMERS' BULLETIN NO. 257.—SOIL FERTILITY.

Definition of fertility 5
Plants must breathe 6
Plants must drink 7
Plants must feed 9
Plants must have a proper sanitary environment 13
Paraffin-pot method of testing the fertilizer requirements of soils 22
Questions and answers 27
Concluding remarks 34
Appendix: Wire-basket method for determining the manurial requirements of soils 36

FARMERS' BULLETIN NO. 258.—TEXAS OR TICK FEVER AND ITS PREVENTION.

Introduction 5
Name and symptoms 6
Definition 6
History 7
Cause of the disease 8
Life history of the cattle tick and the part played by it in producing Texas fever 10
How to distinguish harmless ticks found on cattle from Texas-fever ticks 12
Some objections to the role of ticks as carriers of Texas fever, with explanations 17
Other injurious effects of cattle ticks 19
Loss occasioned by cattle ticks 21
Period of development of disease after exposure to ticks 24
Symptoms 24
Appearance after death 26
Course and termination 27
Infective character 28
Animals infected 29
Diseases mistaken for Texas fever 29
Treatment 30
Prevention 30
Federal sanitary regulations 40
Other important measures for reducing the infected area 42

FARMERS' BULLETIN No. 259.—EXPERIMENT STATION WORK, XXXV. Page.

Use of commercial fertilizers 5
Weight of lime per bushel 6
Spreading lime 7
Soil sterilization 9
Weights per bushel of seeds 10
Disease and insect-resistant crops 15
Cultural methods of controlling billbugs and the corn root-louse 20
Asparagus rust and its control 21
Alfalfa meal as a feeding stuff 22
Singed cacti as forage 25
Profitable cattle feeding in the South 27
Milk fever 28
Nail wounds in horses' feet 30
Use of a cheap canning outfit 30

FARMERS' BULLETIN No. 260.—SEED OF RED CLOVER AND ITS IMPURITIES.

Importance of red clover 5
The seed 5
Home testing of seed 8
Seed testing of the United States Department of Agriculture 9
Change of seed 9
Weed seeds in red clover seed 9
Impurities in American-grown red clover seed 11
Impurities in European-grown red clover seed 11
Description of the seed of red clover 12
Descriptions of weed seeds most commonly found in red clover seed 12
Weed seeds indicating the source of clover seed 24

FARMERS' BULLETIN No. 261.—THE CATTLE TICK IN ITS RELATION TO SOUTHERN AGRICULTURE.

Difficulties of the cattle industry of the South 8
Effect of the tick on southern cattle 8
Possible progeny of one female tick 11
Increased tick infestation in small pastures 11
Drain on the animal by tick infestation 12
Other troubles caused by the tick 13
The tick an obstacle to progress 13
Remedies 14
Eradication of the tick 16
The enormous losses caused by the tick 17
Benefits that would follow tick eradication 21

FARMERS' BULLETIN No. 262.—EXPERIMENT STATION WORK, XXXVI.

Water for table use 5
Fertilizing value of different phosphates 7
Winter wheat 11
Glutenous and starchy wheats 14
Dry farming 15
Improved method of canning 18
Beet molasses and beet pulp for farm animals 19
Muddy *versus* dry-feed lots 23
Rearing and marketing guinea fowls 25
Color of eggs 27
Spraying for scale insects in the fall 30
Planting white pine in New England 31

FARMERS' BULLETIN NO. 263.—PRACTICAL INFORMATION FOR BEGINNERS IN IRRIGATION.

Page.

Introduction 5
Selection and location of an irrigated farm 5
The water supply 7
Farm ditches 10
Preparation of land for irrigation 19
Irrigating different crops 28
How to lessen the waste of water 36
Right quantity of water to apply 37
Conclusions 39

FARMERS' BULLETIN NO. 264.—THE BROWN-TAIL MOTH AND HOW TO CONTROL IT.

Introduction 7
The brown-tail moth in Europe 8
Introduction into America and subsequent spread 8
Description of the insect 10
Seasonal history 12
Damage to plants 16
Brown-tail rash 17
Natural enemies and parasites 18
Remedies 19
The Massachusetts law 20

FARMERS' BULLETIN NO. 265.—GAME LAWS FOR 1906.

Introduction 5
Legislation of 1906 6
Close seasons 12
Shipment of game 26
Sale of game 34
Licenses for hunting and shipping game 40
Appendix.—Tables showing close seasons for game under county laws 50

FARMERS' BULLETIN NO. 266.—MANAGEMENT OF SOILS TO CONSERVE MOISTURE, WITH SPECIAL REFERENCE TO SEMIARID CONDITIONS.

Movement of water in soils 7
The ideal tilth 7
Effects of tillage 8
Drainage 8
Subsoil plowing of drained lands 10
Subsoil plowing of lands not drained 11
Plowing 12
Cultivation to retain moisture in the soil 16
Conditions in the semiarid regions 18
Crops for semiarid regions 24
Organic matter and the conservation of moisture 27
Summary 29

FARMERS' BULLETIN NO. 267.—EXPERIMENT STATION WORK, XXXVII.

Breeding corn and the prevention of inbreeding 5
Buckwheat 10
Sugar beets on alkali soils 14
Alfilaria as a forage plant 17
Apple bitter rot 21
The grass-mulch method of orchard culture 23
Increasing the hardiness of young fruit trees 26
Protecting cows from flies 28
Effect of silage on the flavor or odor of milk 29
Cold storage of cheese 31

FARMERS' BULLETIN NO. 268.—INDUSTRIAL ALCOHOL: SOURCES AND MANUFACTURE.

Page.

The denatured alcohol law 5
Industrial or denatured alcohol defined 7
Substances used for denaturing alcohol 8
Sources of potable alcohol 9
Alcohol defined 10
Agricultural sources of industrial alcohol 10
Composition and yield of alcohol-producing crops 13
Utilization of waste material or by-products 33
Manufacture of alcohol 37
Conclusions 42

FARMERS' BULLETIN NO. 269.—INDUSTRIAL ALCOHOL: USES AND STATISTICS.

Introduction 5
Heating and illumination 5
Alcohol motors 11
Uses of denatured alcohol not directly entering into farm operations 14
Use of undenatured alcohol free of tax 18
Statistics on alcohol production 21

FARMERS' BULLETIN NO. 270.—MODERN CONVENIENCES FOR THE FARM HOME.

The water supply 3
The house 9
Plumbing 10
Earth closets 21
Disposal of sewage 21
Disposal of ashes, garbage, and miscellaneous refuse 35
Heating systems 36
Examples of homes where some modern conveniences have been installed 39
Possibility of introducing modern conveniences into houses already built 42
Advantages of building first on paper 47

FARMERS' BULLETIN NO. 271.—FORAGE CROP PRACTICES IN WESTERN OREGON AND WESTERN WASHINGTON.

Introduction 7
Description of the region 7
Haymaking 9
The silo 11
The nature of leguminous plants 13
Forage crops 14
Seeding timber burns and burnt slashings 39

FARMERS' BULLETIN NO. 272.—A SUCCESSFUL HOG AND SEED-CORN FARM.

Introduction 5
The system of management 5
Shelters 5
Watering device 11
Soy beans 11
Corn 12
Feeding value of each crop 13
Proposed change in cropping system 13
Substitutes used when clover fails 13

Page.
Labor 14
Financial results 14
Conclusion 16

FARMERS' BULLETIN 273.—EXPERIMENT STATION WORK, XXXVIII.

Loss of nitrogen from soils 5
Value of manure as affected by feed 6
Continuous corn culture 7
Pasturing wheat 8
Storage of sweet potatoes 9
Rotting of potatoes in storage 10
Hog cots 11
The disinfection of stables 14
The effect of horsetail weeds on horses 16
A new method of treating calf scours 17
Preserving eggs 17
Wheat bran 19
Testing individual cows 21
Clean milk 23
Cleanliness in the dairy 27
Grading cream 30
Use of paraffin in dairying 31

FARMERS' BULLETIN No. 274.—FLAX CULTURE.

Condition of flax culture in the United States 7
Importance and value of the crop 9
Distribution of the crop 10
Climatic conditions 12
Soil conditions 12
Growth periods of the crop 13
Cultural methods 14
Fiber processes 23
Flax diseases 30
Varieties of field flax 32
Future of the flax industry in America 34
Recommendations to growers 34

FARMERS' BULLETIN No. 275.—THE GIPSY MOTH AND HOW TO CONTROL IT.

Introduction 7
The gipsy moth in Europe 7
Introduction into America and subsequent spread 9
The territory now infested in the United States 10
Description of the insect 12
Seasonal history 13
How the insect spreads 14
Damage to plants 15
Natural enemies and parasites 15
Remedies 16
What the State of Massachusetts is doing for the control of the insect 19
What other States hope to do 21
What the National Government is doing 21